Preface

To attempt to describe the extraordinarily rich and varied career of John Frederick William Herschel is to face several difficulties. Herschel's work extended over many scientific fields, each now a separate specialty. This diversity compels the treatment of many topics only by mention or reference. Others, more familiar to the author, have been treated with greater completeness. Some such unevenness is inevitable in any scientific biography but is probably unusually pronounced in this. The work is less than a complete portrait, but if the sketch succeeds in bringing to life Herschel's scientific achievements and vivid personality it will have achieved much. If it stimulates study of Herschel and his times it will have achieved more, for, nearly a century after his death, no complete biography exists. This is remarkable when one considers the commanding position Herschel occupied among Victorian scientists. Such a gap in the literature can hardly be filled by a single publication.

In the preparation of this book, I have used the following unpublished primary sources: John Herschel's diaries, 1834-1871, copies in the possession of the Royal Society, London; John Herschel's letters, 1812-1871, copies in the possession of the Royal Society, London, and extracts compiled by Mira F. Hardcastle, a granddaughter of John Herschel, and in the possession of Mrs. E.D. Shorland, a great-granddaughter; fragment of a biography of John Herschel (1792-1830) by Mira F. Hardcastle, in the possession of Mrs. E.D. Shorland; Chemical Experiments, vol. 3, notebook by John Herschel in the possession of the Science Museum, London; Record Books of the Royal Mint, containing correspondence and memoranda of John Herschel, 1851-1854, in the Archives of the Royal Mint, London. Important published sources on the Herschel family are Memoir and Correspondence of Caroline Herschel (1750-1848), edited by Mrs. John Herschel, and A Short Biography of Sir John F.W. Herschel, Bt., by Constance A. Lubbock, a fragment of a memoir by Herschel's youngest daughter. These books are included with other biographical works on John Herschel in the bibliography, which also contains a selected list of Herschel's own writings.

Grateful acknowledgment for permission to use illustrations as indicated is made to the following persons and institutions: The Deutsches Museum, Munich – frontispiece; The Kodak Museum, Harrow, England – pages 84 (bottom), 87 (bottom); Patrick Moore, F.R.A.S., East Grinstead, England – page 85; The National Portrait Gallery, London – pages 76, 78; The Royal Astronomical Society, London – page 79; The Science Museum, London – page 84 (top); Mrs. E.D. Shorland, Bracknell, England – pages 75, 77, 80, 81, 82, 86, 87 (top). The illustrations on pages 83 and 88 are reproduced from J.F.W. Herschel, *Results of Astronomical Observations...* (London: Smith, Elder, 1847).

Günther Buttmann